

Name: Julia (Juyeon) Lee

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Course: IT Foundations of Database Management

Introduction

This week, I learned the definitions Functions and how to write the code in SQL Server Management studio using the functions.

Topic

1. Explain when you would use a SQL UDF.

SQL UDF (User Defined Function) is used when you need to logic, like calculating discounts, tax rates or lead times in Supply Chain. Logic is used across multiple queries, a UDF helps standardize and simplify the process, reducing redundancy.

2. Explain are the differences between Scalar, Inline, and Multi-Statement Functions.

* Scalar Functions are best for simple calculations, such as converting weight or calculating total cost per order. If large queries are used, it can slow performance.

* Inline Functions are for filtering and retrieving data using SELECT query, such as listing delayed shipments based on expected arrival date vs actual ship dates.

* Multi-Statement functions are for complex data processing and logic is needed, such as tracking order fulfillment across multiple warehouses.

Summary

Functions are very helpful to custom aggregations and data transformations, and enables advanced data processing, also simplifies complex data processing.